

is located about 20 miles west of Nogales. The location for the *Psilotum* is about a six mile hike down the canyon.

*Psilotum nudum* is widespread in the tropics and occurs also in Florida and the southeastern United States. It has been recorded also from Texas by Correll, and from the Río Mayo, Sonora, Mexico, by Gentry. The latter is the closest recorded locality. Incidentally, the Ball Moss, *Tillandsia recurvata* L., the only epiphytic flowering plant known in Arizona, also grows in Sycamore Canyon and a few other southeastern Arizona localities. It has a range similar to that of *Psilotum*—Florida and the southeastern United States, Texas, and northern Mexico.—WALTER S. PHILLIPS, *Department of Biological Sciences, University of Arizona, Tucson, Arizona 85721.*

### Notes and News

THE AMERICAN FERN SOCIETY ANNUAL MEETING this year will be with the A.I.B.S. at Bloomington, Indiana, on the campus of Indiana University. Dr. Charles Heiser will be our local representative. We will have a foray on August 20–22. Foray reservation requests should be sent to Miss Lois Carlson, Matthaei Botanical Garden, University of Michigan, Ann Arbor, Mich. 48105. On August 24 we will have a Society luncheon, along with a program of papers. Dr. John T. Mickel, New York Botanical Garden, Bronx Park, Bronx, N. Y. 10458 is the program chairman. On August 25 the Society will sponsor a symposium on "Ferns as Tools in Solving Biological Problems." The General Section and the Developmental Section of the Botanical Society of America will co-sponsor the symposium.

### Recent Fern Literature

THE ILLUSTRATED FLORA OF ILLINOIS: FERNS, by Robert H. Mohlenbrock, Southern Illinois University Press, Carbondale, Illinois, 1967. 119 pp. \$8.00.—This, the most recent state fern flora, is similar in format to Billington's "Ferns of Michigan," but

it does include some new data regarding spores and chromosome numbers not treated by Billington. It differs from Vannorsdall's "Ferns of Ohio" in that it is illustrated by drawings rather than photographs, which is not always an advantage. Mohlenbrock's drawings of details are good, as are some of those of small ferns, but the larger compound ferns like *Dryopteris carthusiana* (*D. spinulosa*), *D. intermedia*, and others are not recognizable from these drawings but are readily recognizable from Vannorsdall's photographs. The last enumeration of Illinois pteridophytes recorded 67 species; the present work treats 81 species and six varieties. This large increase is partly due to intensive fieldwork during the last few years and partly due to different specific concepts. The 81 species include a number of hybrids perhaps not qualifying as true species. The treatment of each species includes the common names, habitat, general range, Illinois range with map, and taxonomic comments. One new variety is described, *Lycopodium lucidulum* var. *tryonii*, which differs in having the leaves entire, and which is said to be known only from Jackson County, Illinois. It seems rather unlikely that a true variety of the widespread *L. lucidulum* would be known from a single locality. The plant described could well be a hybrid with *L. porophilum*, which apparently has not been collected in Jackson County, but which does grow not far away. I believe that I have heard of reports of such entire-leaved plants from outside Illinois also. There are a few errors that might be pointed out. The drawing of *Adiantum pedatum* is inaccurate in not showing the solitary pinnules that are present on the internodes beyond the second fork; these isolated pinnules are important for they may help to explain the branching, if they are equivalent to all the rest of a branch. *Dryopteris cristata* is said to have a chromosome number of  $2n = 246$ , but I believe that this is an error, for this is regarded as a tetraploid ( $2n = 164$ ) rather than a hexaploid. The description of the indusium of *Dennstaedtia* as "modified from a recurved tooth of the leaf margin" is not accurate, for the indusium is partly an extrorse inner indusium united with a modified introrse marginal lobe. The entry in the key on page 85 separating *Woodsia* from

*Cystopteris* will hardly work, for the indusia in *Woodsia* are said to separate into "shreds," which would apply to *W. ilvensis* but hardly to *W. obtusa*, where the indusial lobes are broad. However, these are strictly minor criticisms. The book is creditable and usable and should be in the libraries of fern students.—C.V.M.

VASCULAR PLANTS OF THE PACIFIC NORTHWEST, PART 1. By C. L. Hitchcock, A. Cronquist, M. Ownbey, and J. W. Thompson. 914 pp. 1969. University of Washington Press, Seattle, Washington 98105. \$25.00.—This, the fifth and last volume of the flora of the Pacific Northwest, completes this monumental work, the first parts of which were published several years ago. Although the last to be issued, this is the first part, which contains the treatment of the vascular cryptogams, the gymnosperms, and the monocotyledons, including the large and difficult groups Cyperaceae and Gramineae. The present part contains a glossary, a general index, and an appended list of additions and corrections to the previously published parts. The ferns and fern allies are treated by Dr. Cronquist, and very well too. The keys are accurate and usable—not too technical but technical enough when necessary. One detail is that finite verbs are sometimes used in the keys—e.g. p. 57, "... indusium which is so close to the margin ..." or "submarginal row that is protected by ..."; the use of such "which" clauses is not usual in botanical keys and is never necessary. The treatment is conservative in its recognition of varieties, species, and families. I approve of placing the true ferns all in the inclusive family Polypodiaceae at least until much more is known about their morphology, cytology, and evolution. Cronquist does indicate in the key some of the groups that have been called families, including one called "Aspidiaceae." This is an incorrect name because according to the Code of Nomenclature a family name must be based on the name of a legitimate genus, and *Aspidium* is an illegitimate generic name, superfluous when published because it originally contained the type species of several earlier generic names that ought to have been adopted, such as *Dryopteris*, *Thelypteris*, *Tectaria*, *Athyrium*, *Polystichum*, and perhaps others.